

South Dayton Dump and Landfill

OU2 RIFS WP (09/12/2013)

Ohio EPA Comments – 11/3/2013

Comments chronologically through text:

1. Do not make changes to text that has not been commented on: There are many instances within the text and DQO tables where changes were made that were not recommended through comments. For example, changes have been made to Action Levels in the DQO tables that were not recommended from comments. Please respond with changes that affect only what was commented on.
2. Please provide further information on the following statement: Section 2.1 on page 8 states, *“There is debris in the Quarry Pond that appears to have either been dumped by third parties or trespassers, after the Site operations ceased, into the pond or washed there during storm events. At the time of CRA's November 17 and 18, 2005 inspections, CRA observed four partially submerged drums that appeared to be empty in the northeastern part of the Quarry Pond.”*

Please discuss data/information (or cite where such information can be found) for concluding that debris in the QP was dumped by third parties etc. after the Site operations ceased and that observed drums were empty: The above statement does not provide data for the conclusions or indicate that data has been collected: For example, the drums in question may have had physical indicators that they were empty such as holes.

If such conclusions have been confirmed in past reports, please cite the reports for reference or provide a brief summary of the information. If such conclusions have not been confirmed, please add confirmation as a data gap to the QP investigation WP. Otherwise, the statement can be removed from the text.

3. Please add restoring ground water to its beneficial use to the list of objectives for OU2 on page 17: Section 4.1 on page 17 lists objectives for contaminant sources and affected media in OU2. Restoring ground water to its beneficial use has not been included as one of the objectives and needs to be added.

4. Please modify the document to include a discussion and proposal of the data needed to evaluate the preliminary remedial technologies, process options, and alternatives: Section 4.0 presents preliminary response objectives and preliminary remedial technologies. A discussion and proposal of the data needed to evaluate these objectives and technologies during the FS has not been included and needs to be added.
5. To reconcile the text with the DQOs, please coordinate the data needs with expected data uses into the DQO tables: Section 4.0 presents preliminary response objectives and preliminary remedial technologies, it has been requested that a discussion and proposal of the data needed to evaluate objectives and technologies during the FS be included. Please coordinate the data needs stated in the text to the data uses stated in the text into the DQO tables.
6. Please include hydraulic containment for contaminated ground water as a containment technology: Section 4.4 on page 19 lists containment technologies to be considered – hydraulic containment for contaminated ground water is not listed and should be added.
7. Remove the second paragraph of section 4.5 on page 21 and instead add language to direct the reader to the ARARs table for a full review of OU2 ARARs: Section 4.5 discusses the ARARs. On page 21, a discussion is included on Ohio law; this paragraph is not relevant to federal superfund work.
8. Please provide further information on the concept of the phased approach to data collection outlined in section 5.1 on page 23: The text states that *“the first phase will include investigations to determine the nature and extent of contamination, while the second phase will focus on determination of risks to human health and the environment.”*

The HH and ecological risk assessment is part of the superfund process and it is not necessary to make a separate phase for this work. In addition, the second phase would be paperwork (applying data to HH and ecological risk models) and would not need to be classified as a phase.

9. Please clearly identify (with descriptive titles) any other phases that are anticipated in order to complete the OU2 work.

10. Please provide descriptive titles for all phases of work and indicate in what WP the phase originates: Section 5.0 proposes DQOs for investigations of different media/areas on OU2. The DQOs outline phases for the media/area in question. It is difficult to follow listed data gaps and proposals for action as it appears that proposed phases overlap/carry over from one media/area investigation to another. When one phase precedes another and crosses into another investigation, please provide the descriptive title for the phase and indicate under what media/area WP the phase originates.
 - a. For example, section 5.2.1 for the soil vapor investigation states “*CRA will install temporary soil gas probes at selected locations, dependent on the observations CRA makes during the drilling of the soil boring.*” It would appear that the soil vapor investigation is a sub-phase of Phase 1A proposed during the Soil/fill investigation. However, this is not stated – for clarity, preceding phases should be identified with their descriptive name.
 - b. Each media/area investigation has a Phase 1, are these Phase 1s to be done as one collective phase, or are they intended to be carried out separately? If they are to be separate investigations, a more descriptive name should be given to each.

11. In discussions under section 5.0, please clearly state when data will be collected: Some of the phases appear to overlap and are incorporated at determining steps regarding investigation on other media, it is necessary to clearly state when the data will be collected and how it will be used/applied and what conclusions can be drawn from collection. For example, soil samples on OU2 seem to be used as a qualifier for any ground water investigation and soil vapor investigation. This correlation and carry over is not clear from the text and DQO tables.

12. Ohio EPA recommends that surface water characterization parameters be taken of the QP water column: Section 5.3 on page 26 proposes to take water samples within the QP: “*Each sample will be collected from approximately the midpoint of the water column and analyzed for TCL VOCs, TCL SVOCs, TCL pesticides/PCBs, TCL herbicides, TAL metals and cyanide parameters.*” Ohio EPA recommends that the proposal be modified to include a sampling regime that considers not only constituents of concern, but also major cations and anions, indicator parameters (pH, temperature, conductivity, oxidation reduction potential, and dissolved oxygen), and the following REDOX sensitive parameters: nitrate, manganese, iron, and sulfate. Interpretation of these parameters will aid in determining the nature of contamination in the QP from various sources including contaminated fill within the QP, surface runoff, and contaminated ground water influence and will assist evaluation of alternatives for the QP in the FS.

13. In proposed work under sub-sections in section 5.0, please include the screening levels that will be used for proposed sample analysis. Please ensure that the DQO table action levels match the screening levels proposed in the textual discussion.
14. Please reconcile inconsistencies between the text and the DQO tables regarding action levels: The text under section 5.0 does not present screening levels that the proposed data will be compared to. The DQO tables do not provide consistent mention/use of Action Levels identified within individual DQO tables. There are inconsistencies within the OU2 RIFS WP text and the DQO tables regarding Action Levels, data needs, and phased work.
15. The title for the fill investigation in section 5.2 starting on page 24 and the title for the fill investigation DQO table 3.1 do not match; please reconcile the discrepancy in text and DQO table titles.
16. In section 5.2, it appears that ecological risks have been left out of the Phase 1A proposed work. Please include ecological pathways in the discussion of the data needed: Page 24 outlines the goals of Phase 1A for the soil/fill investigation: *“The Phase 1A investigation of the fill within OU2 will include surface and subsurface soil and groundwater sample collection and analyses to identify direct contact risks and risks to groundwater as outlined below.”*
17. Please discuss the 2012 and 2013 investigation results and indicate whether the information can help guide the soil gas investigation. Please provide further information on the type(s) of screening that will be used to *“identify evidence of waste or chemically impacted material”* during the soil/fill investigation: Section 5.2.1 states *“CRA and USEPA completed vapor intrusion studies in 2012 and 2013 to assess potential effects of soil vapor on occupied buildings located on and in the immediate Site vicinity. In order to further assess soil gas conditions within the OU2 fill material, CRA will install temporary soil gas probes at selected locations, dependent on the observations CRA makes during the drilling of the soil boring specifically, if CRA identifies evidence of waste or chemically impacted material. CRA will provide a description of the proposed probe locations to USEPA for review, if they are needed, prior to implementing the work.”* Past investigations can help in locating new probes and in determining specific areas where there is potential/suspected soil vapor issues. Please discuss how the soil/fill samples will be screened to determine if gas probes are needed – is such information provided in the QAPP?

18. Please add ecological risk assessment measures to the proposed flood plain investigation, section 5.4 on page 27: Ecological risk assessment measures have not been added into the floodplain soil investigation and should be included. In the DQO table 3.6 for floodplain soil, only direct contact standards are proposed for the Action Levels, ecological screening levels must also be included.

19. Please clarify necessary sample depths for completing the HH and ecological RA screening: Section 5.4 of the floodplain soil investigation provides specific depths that samples will be collected and analyzed for COCs, they include “*two depth increments, i.e., 0 to 0.5 feet bgs and 1 to 2 feet bgs, which is relevant for data use in the OU2 RI Report and in the HHRA and ERA.*” In previous comments, it was mentioned that the ecological risk assessment applies to 3ft. bgs. for COC screening.

20. Please reconcile discrepancy in sample depth between the text in section 5.4 and DQO table 3.6.

21. Please provide a summary of ground water data that has been collected to date. Please identify the “*preliminary Groundwater Investigation*” and provide a summary of the goals of the investigation. Please provide a summary of/list ground water contamination pathways that will be investigated during the OU2 RIFS WP. Please identify the “*initial phases of the OU2 investigation*” that will be the basis of the pending OU2 Groundwater Investigation. Please discuss what information will be taken from the initial phases of the OU2 investigation and how the information will be used in determining the scope of the OU2 Groundwater Investigation: Section 5.6 on page 29 states “*CRA will propose the scope of, and DQOs for, the final OU2 Groundwater Investigation following completion of the current preliminary Groundwater Investigation. Also, the final OU2 Groundwater Investigation scope will be developed based on data collected from the initial phases of the OU2 investigation.*” Please provide 1) a discussion of the ground water data that has been collected to date, 2) the goals of the OU1 Groundwater and Data Gap Investigation and discuss how this information will guide the OU2 ground water investigation, 3) a description of the initial phases of the OU2 investigation and discuss how the data collected will guide the OU2 ground water investigation, and 3) list ground water contamination pathways that will need to be investigated in the OU2 investigation.